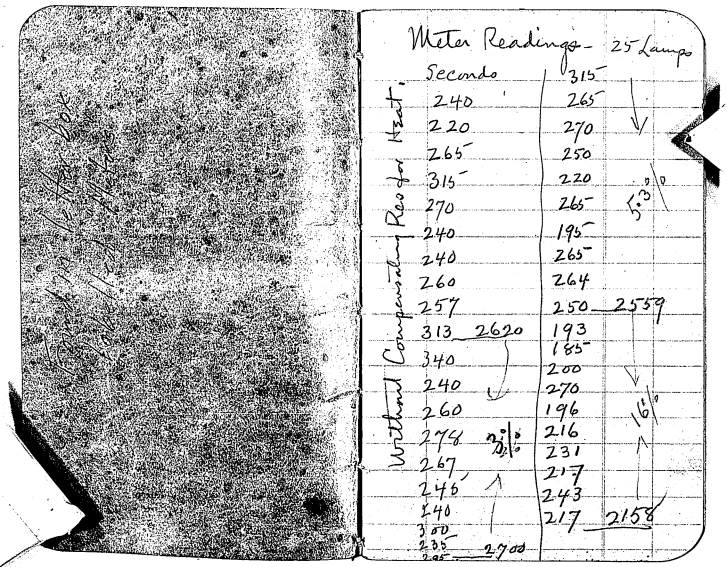
Notebook, PN-97-11-01.1

This pocket notebook was used by Edison in 1897 and 1898. Included are a set of meter readings, notes and calculations regarding meter solutions, two sets of cost analyses for phonograph parts and incandescent lamps, and tables regarding a "jump" (probably induction) telegraph. The pages are unnumbered. Approximately 20 pages have been used.

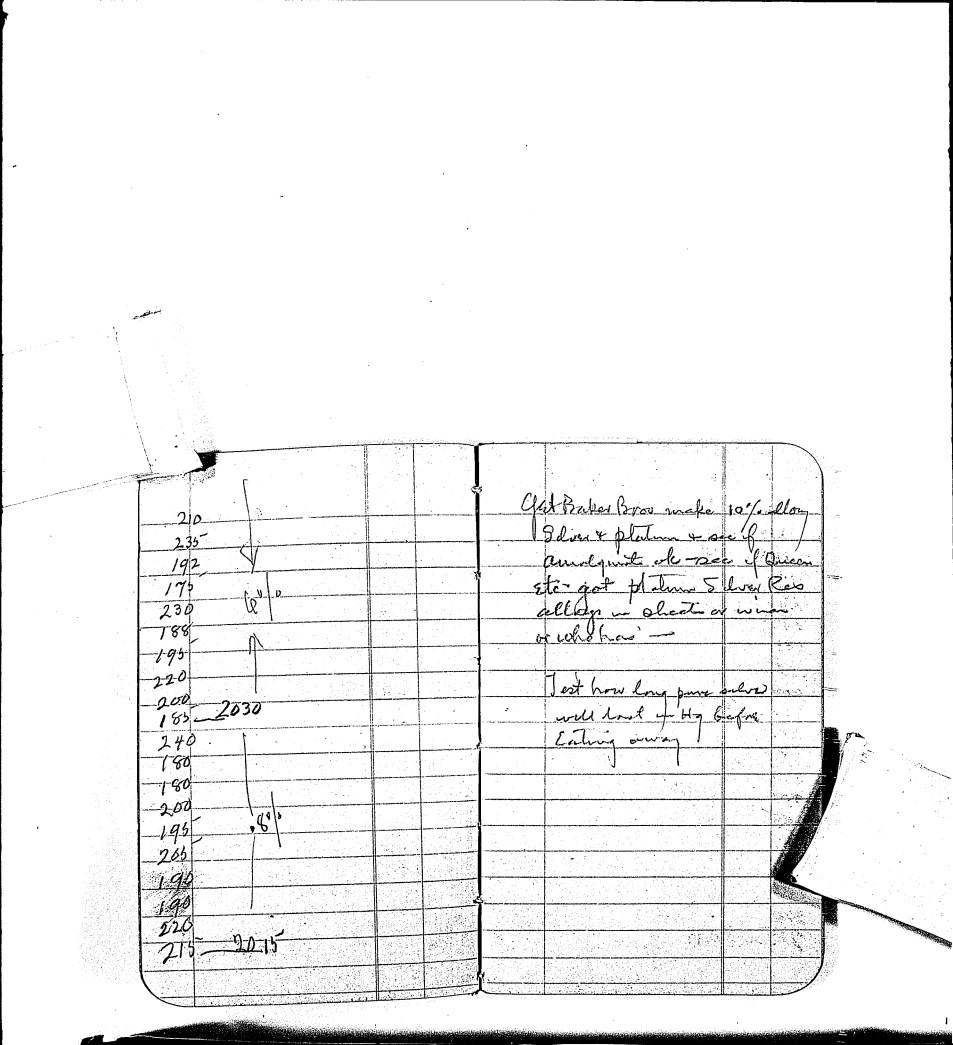


Meter Readings - 25 Lamps

Without Compensating Res for Heat.

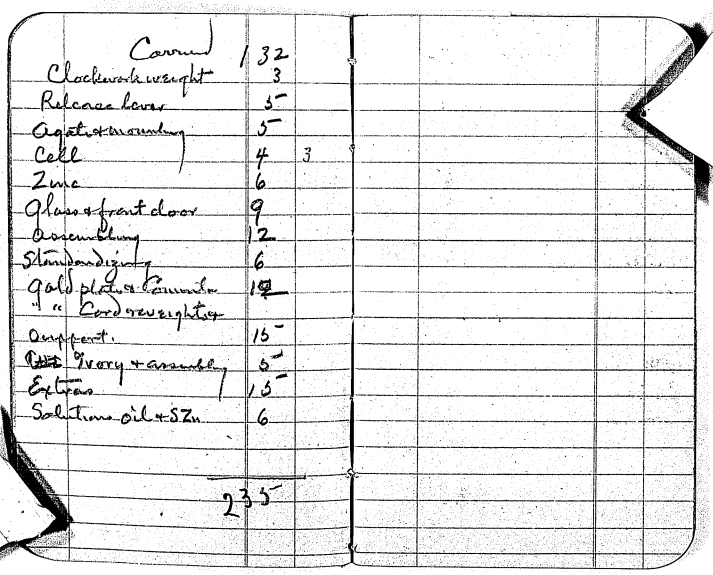
Seconds	
240	
220	
265	
315	
270	
240	
240	
260	
257	
313	2620
340	
240	
260	
278	23 1/2
267	
246	
240	
350	
235	
290	2700

315		
265		
270		
250		
220		
265	5:3 1/2	
195		
265		
264		
250	2559	
193		
185		
200		
270		
196	16 1/2	
216		
231		
217		
243		
217	2158	

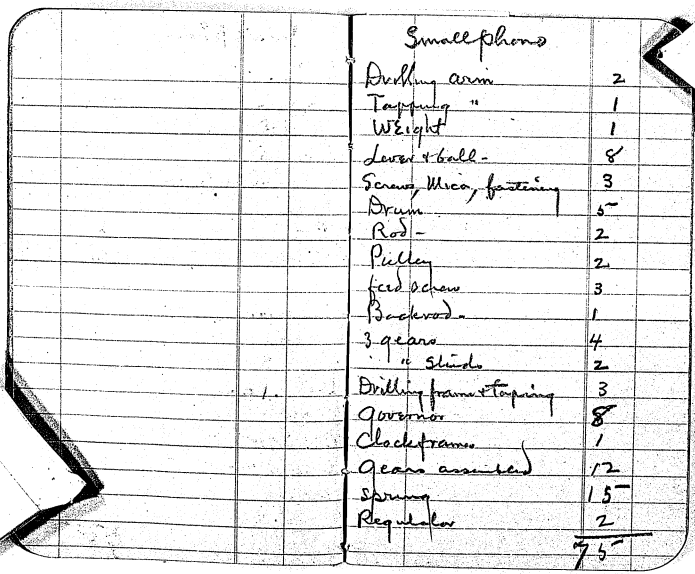

210
235
192
175
230
188
195
220
200
185
2030
240
180
180
200
195
205
190
190
220
215
2015
Clark Brabec Bros make 10% alloy
Silver + platinum + use of
amalgamate ok - use of Quicksilver
Site - got platinum Silver Rare
alloy in electric or wire
or cold hard -
Test how long pure silver
will last if Hg before
Cutting away

Costs - Simple

Wood base + side	25	
Copper 2½ lbs.	6	
Varnishing	5	
Shunt Material + Labor	12 -	8c
Shunt binding posts	5	
Cross connection + posts	8	
~~Lamp~~ Socket	4	
Expansion strip + support	5	
platina + Contact posts	8	
Clockwork	25	
Stock for clockwork	9	
Support bracket, labor + ck	6	10c
hands	1	
Beam + V's Complete	6	
Shrimps	4	
pointer	1	
Weight for balancing	2	ont
	132	



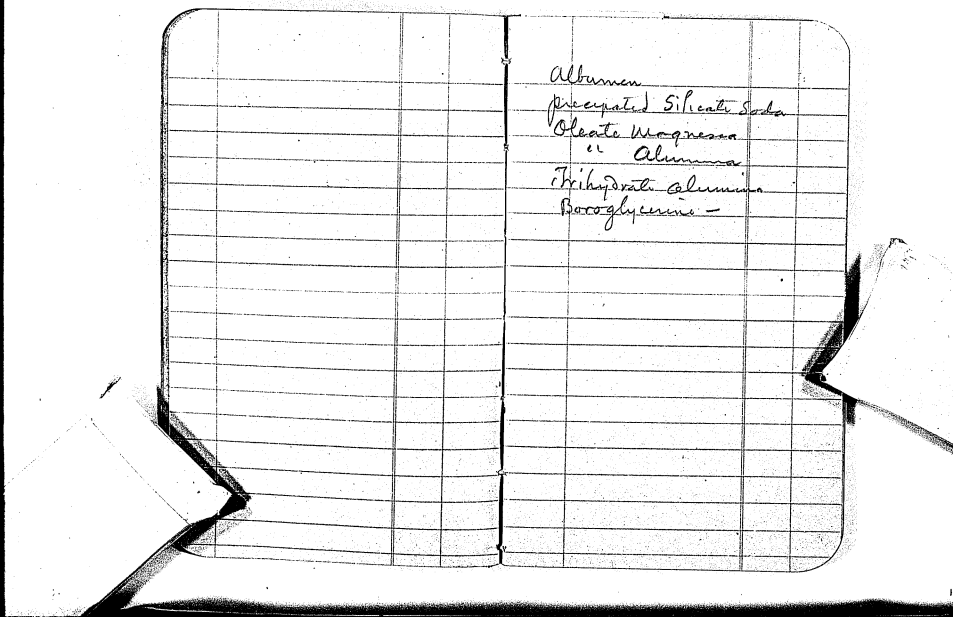
Carried	132	
Clockwork + weight	3	
Release lever	5	
Agate + mounting	5	
Cell	4	3
Zinc	6	
Glass + front door	9	
Casemaking	12	
Standardizing	6	
gold plating Commutator	12	
" " Cord + weights		
Support.	15	
Ivory + assembly	5	
Extras	15	
Solutions oil + Zn	6	
	235	



Small phone

Drilling arm	2
Tapping "	1
Weight	1
Lever & ball -	8
Screws, Mica, fastening	3
Drum	6
Rod -	2
Pulley	2
feed screw	3
Backed rod -	1
3 gears	4
" studs	2
Drilling frame & taping	3
Governor	8
Clock frame	1
Gears assembled	12
Springs	15
Regulator	2
	75

Carried	75
Handle	2
Stop	3
all screws	2
Sand blast + nickel	7
Name —	2
Castings	18
assembling	8
other details	8
Screw thread cut + tapping	4
belt	2
	131.


Albumen
precipated Silicate Soda
Oleate Magnesia
" Alumina
Trihydrate Alumina
Boroglycerine —

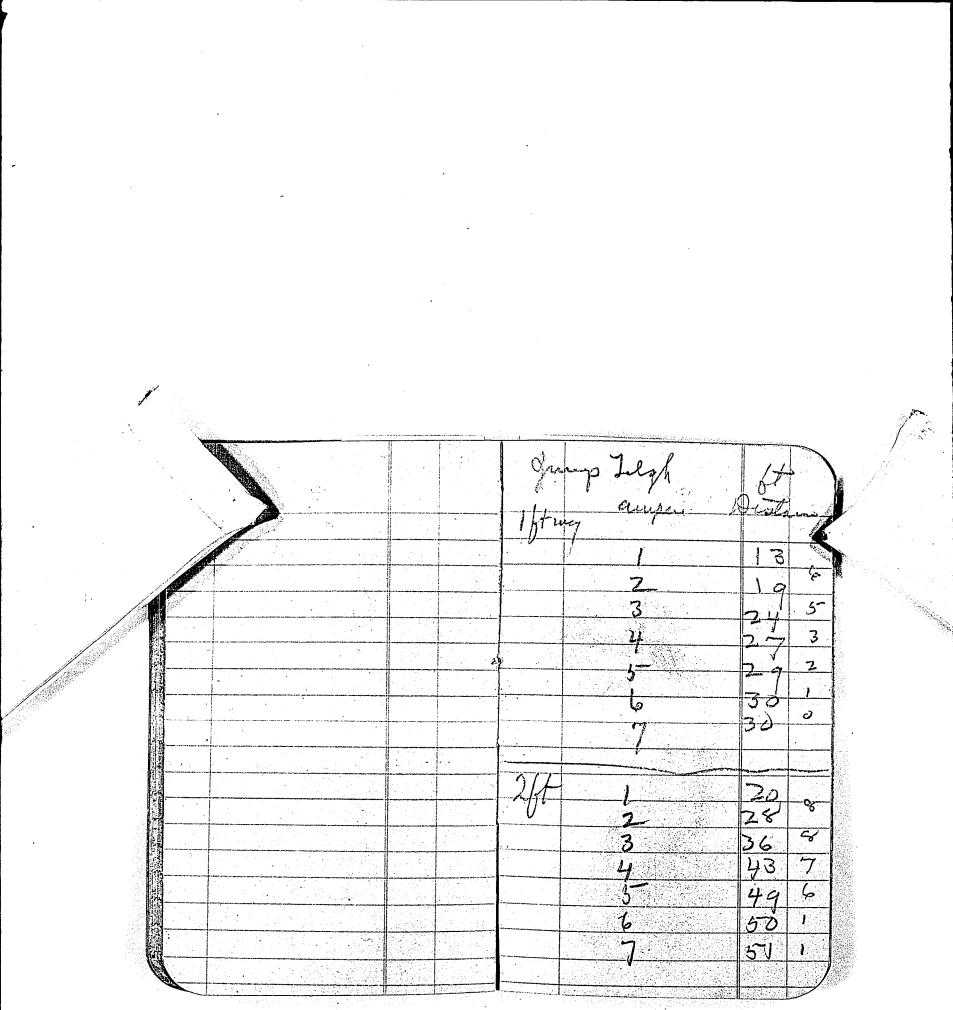
3 pieces

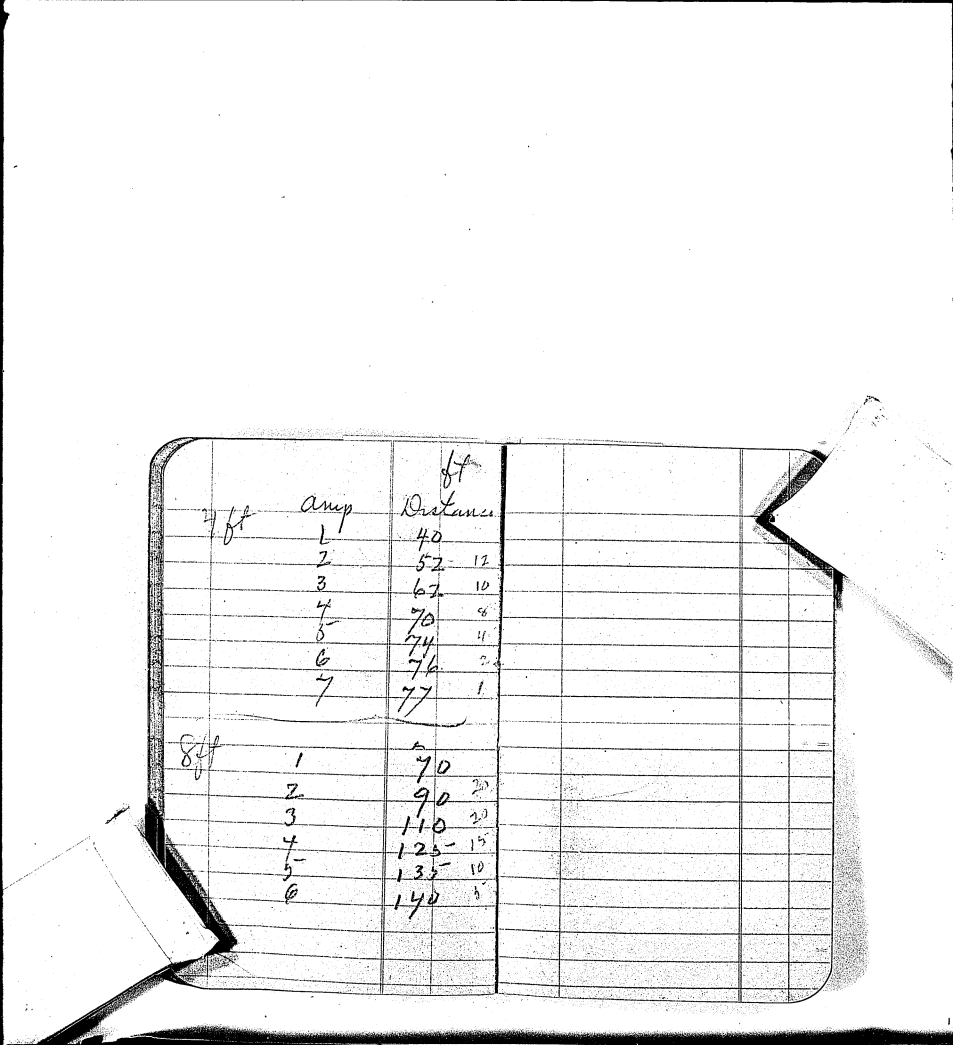
Round
8" long

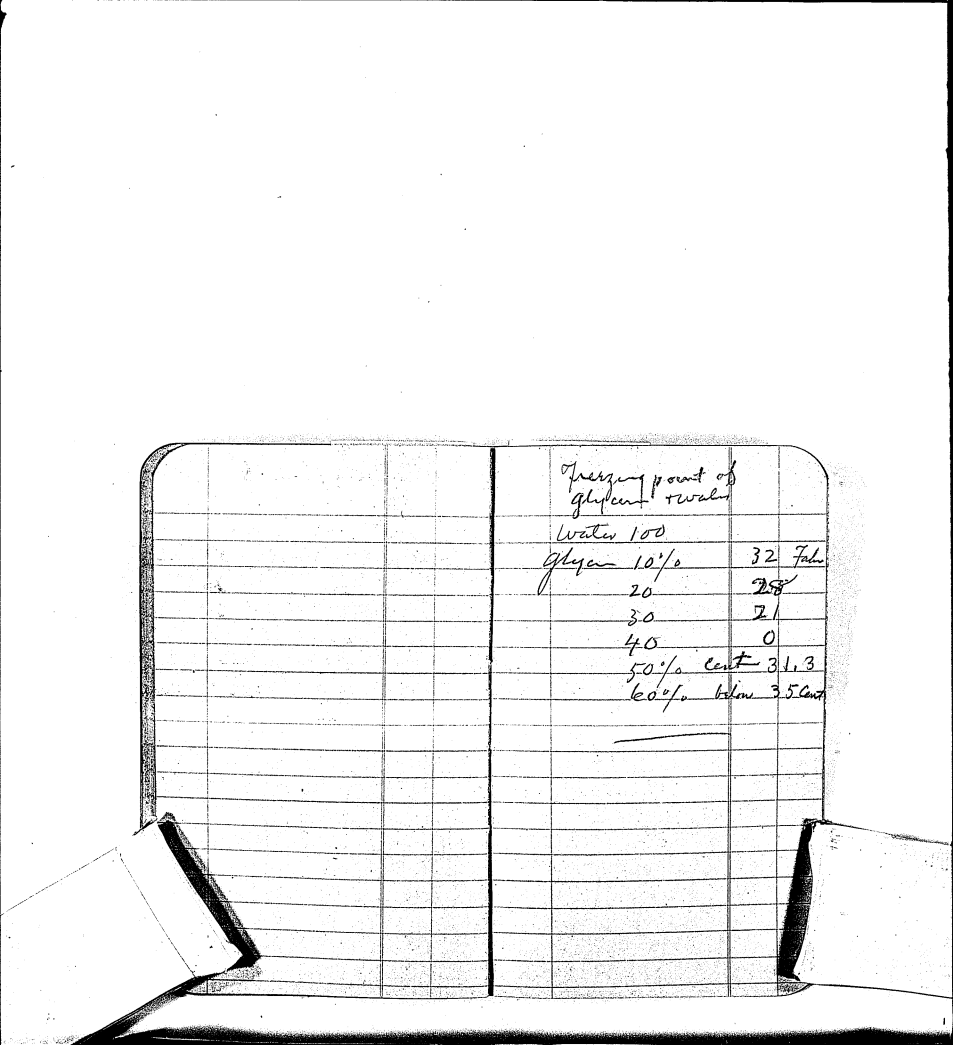
Dia	.750	.745	.750
area sq inches	.442	.442	.436
length inches	10.25		
Tension	10.37		
permt Elong	10.37		
	28.25		
	29.62		
Elastic limit	29.62		

Max 22500 on Spec.
22300
22100

Permanent set
50905
50450
50680


Jump Test
1st try
campers
1st
distance
1 13
2 19 6
3 24 5
4 27 3
5 29 2
6 30 1
7 30 0
2nd
1 20
2 28 8
3 36 8
4 43 7
5 49 6
6 50 1
7 51 1


ft
24 ft
amp
Distance
1
40
2
52 12
3
62 10
4
70 8
5
74 4
6
76 2
7
77 1
8 ft
1
90
2
90 20
3
110 20
4
125 15
5
135 10
6
140 5

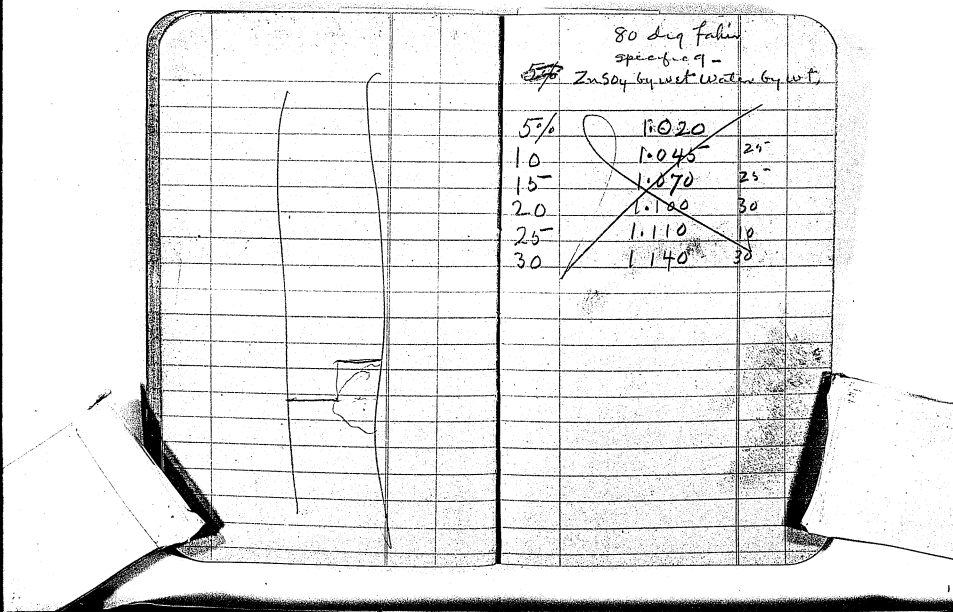

Freezing point of glycerin + water
Water 100
Glycerin 10% 32 Fahr
20 28
30 21
40 0
50% cent 31.3
60% below 3.5 cent

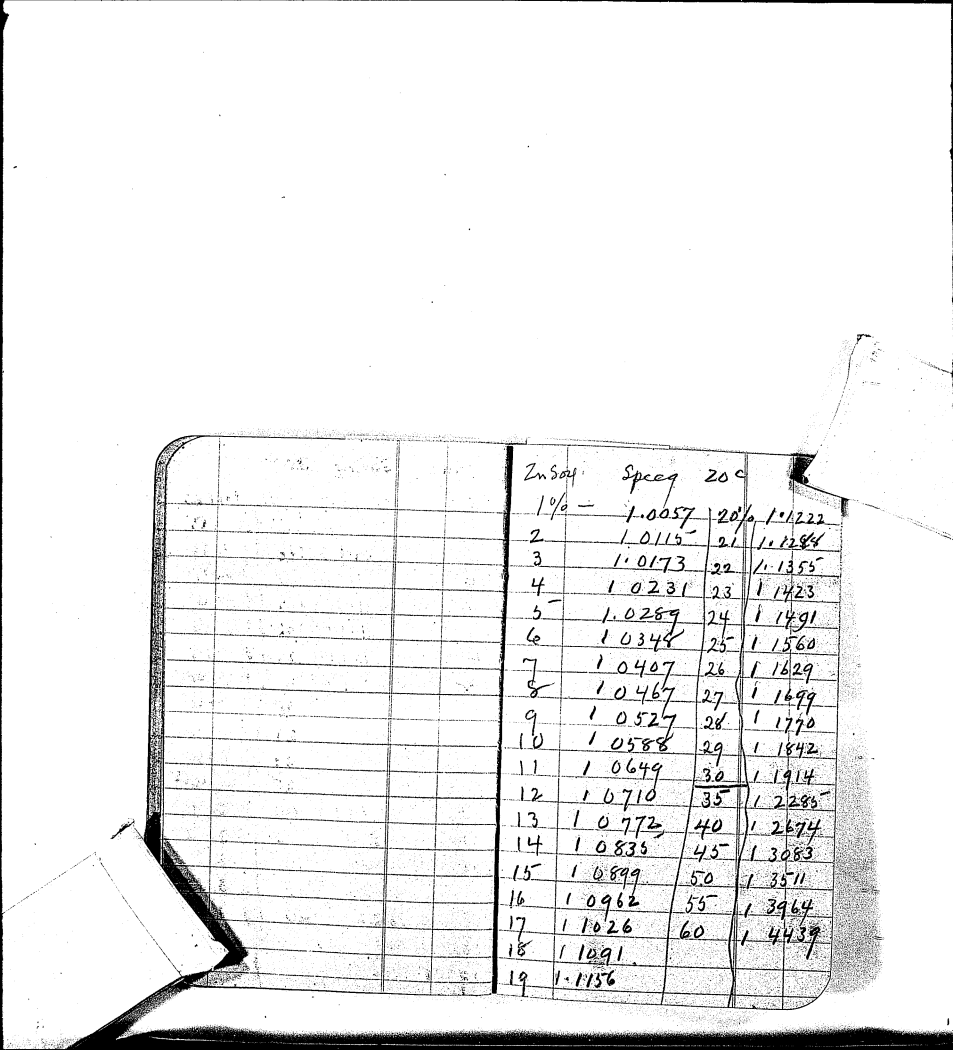
80 deg Fahr

specific g -

~~5%~~ ZnSO4 by wt Water by wt

5%	1.020	
10	1.045	25
15	1.070	25
20	1.100	30
25	1.110	10
30	1.140	30

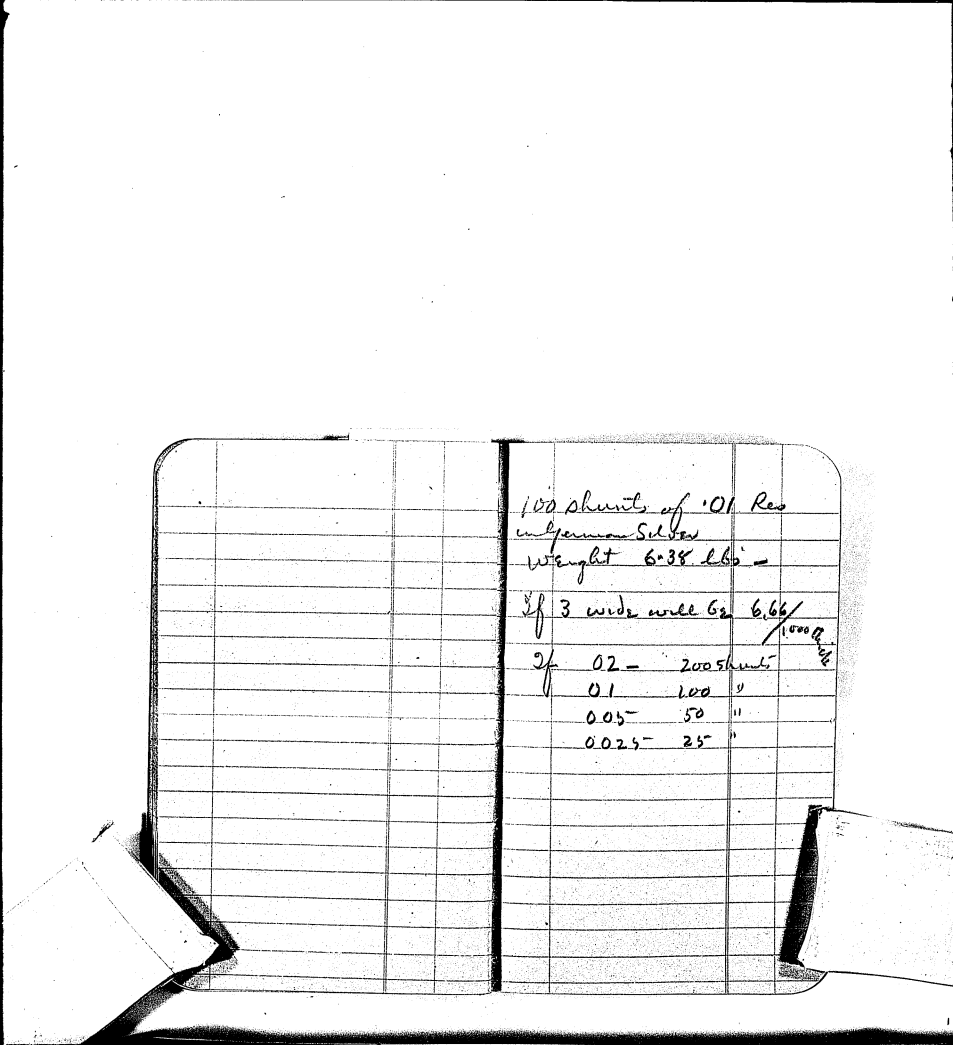




ZnSO4	Spec g 20°		
1%	1.0057	20%	1.1222
2	1.0115	21	1.1284
3	1.0173	22	1.1355
4	1.0231	23	1.1423
5	1.0289	24	1.1491
6	1.0348	25	1.1560
7	1.0407	26	1.1629
8	1.0467	27	1.1699
9	1.0527	28	1.1770
10	1.0588	29	1.1842
11	1.0649	30	1.1914
12	1.0710	35	1.2285
13	1.0772	40	1.2674
14	1.0835	45	1.3083
15	1.0899	50	1.3511
16	1.0962	55	1.3964
17	1.1026	60	1.4439
18	1.1091		
19	1.1156		

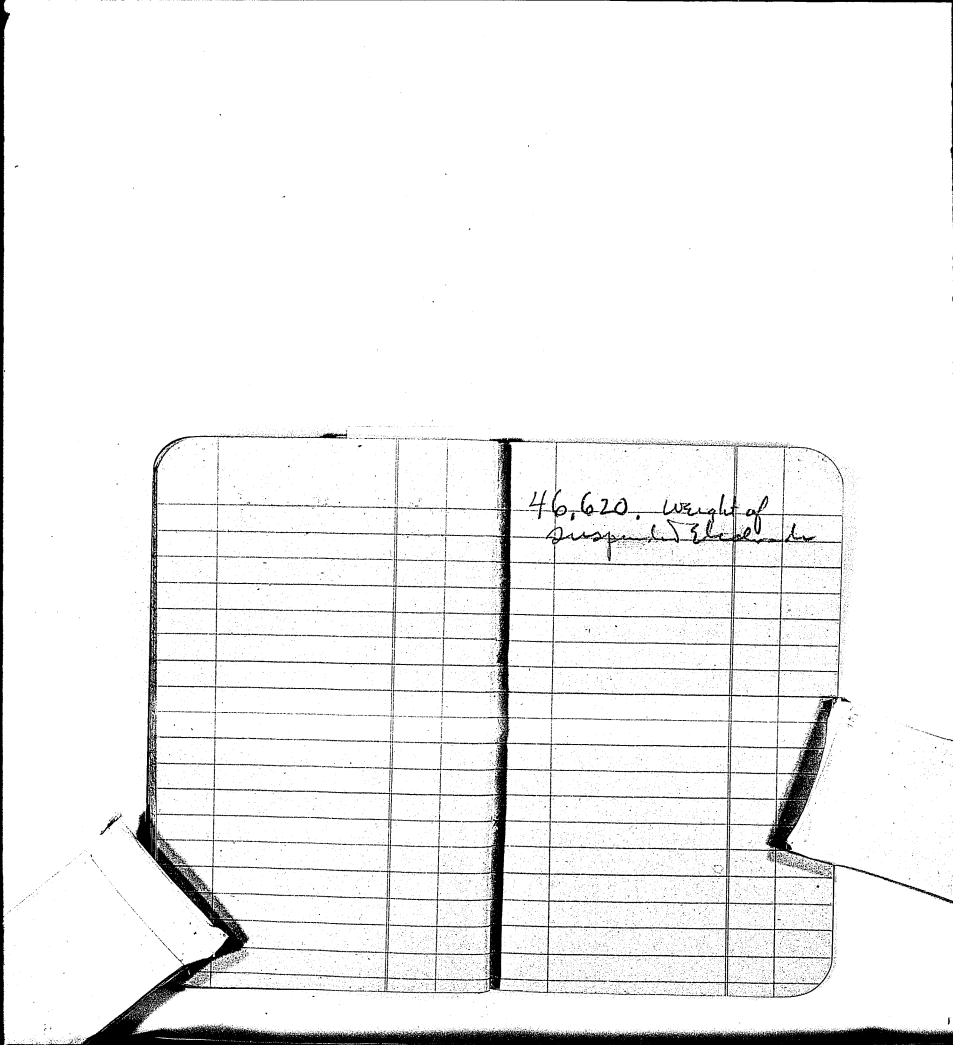
Solubility $ZnSO_4$ Salt,
in 100 parts water

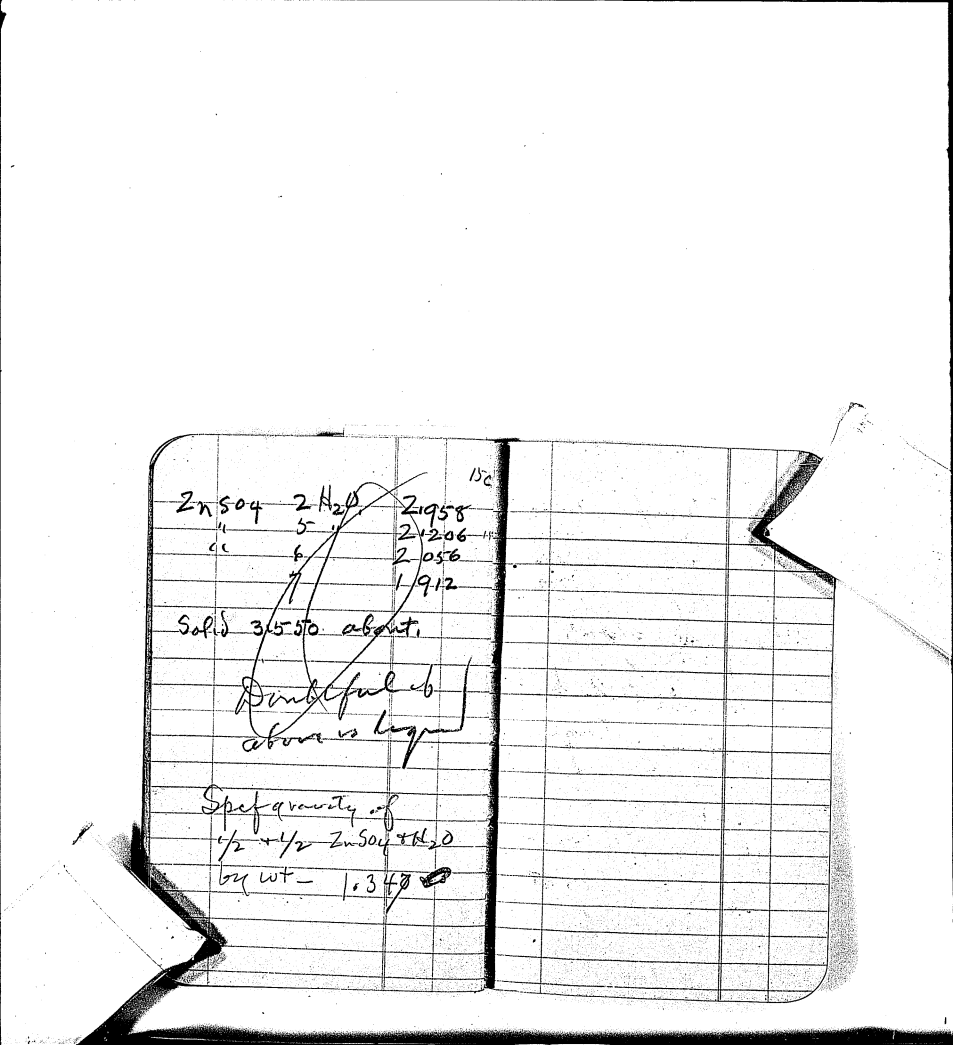
Cent	
0°	115
10	138
20	161
30	190
40	224
50	263
60	313
70	369
80	442
90	533
100	653

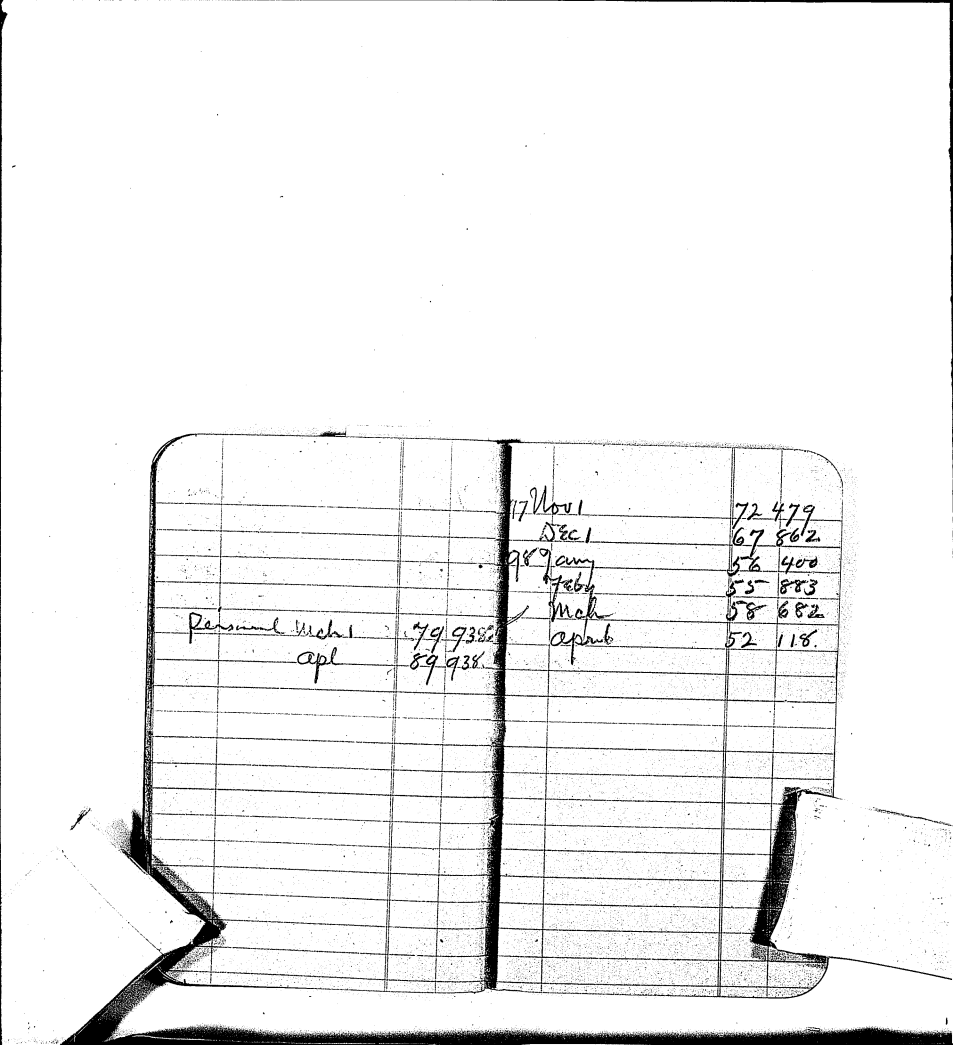
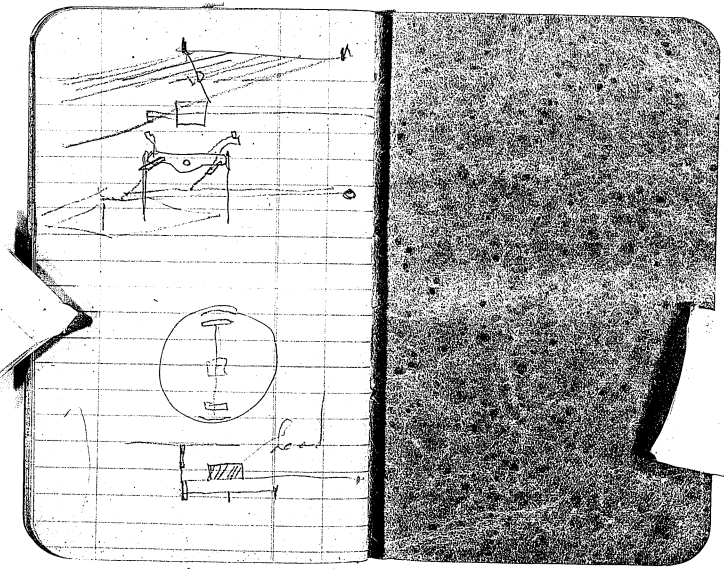

100 shunts of .01 Res
in German Silver
Weight 6.38 lbs -

If 3 wide wall Gs 6.66/1000 Grade

If .02 - 200 shunts
.01 100 "
.005 - 50 "
.0025 - 25 "


46,620. Weight of


15c
ZnSO4 2H2O 2.1958
" 5 " 2.1206
" 6 " 2.0556
" 7 " 1.912
Solid 3.5-5.0 about.
Dividing line
above is sugar
Spec gravity of
1/2 + 1/2 ZnSO4 + H2O
by wt — 1.340


17 Nov 1
Dec 1
1897 Jan
Feb
Mch
Apr
72 479
67 862
56 400
55 883
58 682
52 118.
Personnel Mch 1
Apl
79 938
89 938